CLAIMS

1.   A program table creation method of creating a program
table defining a temporal arrangement of a plurality of
5   contents,

characterized in that said program table is created
through the use of a constraint solution technique on the basis
of a constraint condition related to a selection of said
plurality of contents and/or a constraint condition related
10   to a temporal arrangement of said plurality of contents.

2.   The program table creation method according to claim 1,
characterized in that a description of said constraint
condition is made through the use of a constraint condition
15   description function defined in advance.

3.   The program table creation method according to claim 1,
characterized in that user's liking information indicative
of a liking of a user who watches or hears said contents is
20   acquired as said constraint condition.

4.   The program table creation method according to claim 1,
characterized in that said constraint condition is
automatically acquired by automatically generating said
25   user's liking information through learning of said user's

liking.

5.   The program table creation method according to claim 1,
characterized in that state information indicative of a state

5   related to playing of said contents is acquired as said
constraint condition.

6.   The program table creation method according to claim 1,
characterized in that said program table is created by making

10   reference to content attribute information indicative of an
attribute of each of the plurality of contents.

7.   The program table creation method according to claim 1,
characterized in that, when constraint falls into an excess

15   state in constraint solution processing at the creation of
said program table, priorities are set with respect to said
contents and/or said constraint condition so that said
constraint solution processing is conducted while
preferentially employing said constraint condition higher in

20   priority.

8.   The program table creation method according to claim 1,
characterized in that, when constraint falls into a shortage
state in constraint solution processing at the creation of

25   said program table, scores are set with respect to said contents

and/or said constraint condition so that said constraint

solution processing is conducted by making a comparison between

a plurality of operation results of operations using a function

in which said score is set as a parameter.

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9.   The program table creation method according to claim 1,

characterized in that a constraint logical programming

technique is used as said constraint solution technique.

10   10.   The program table creation method according to claim 1,

characterized in that said program table is expressed by a

tree structure having one or a plurality of hierarchies in

which elements indicative of said contents constituting said

program table are disposed in a lowest-rank layer and elements

15   summarizing features of lower-rank elements are disposed in

a rank higher with respect to the elements indicative of said

contents.

11.   The program table creation method according to claim 10,

20   characterized in that said elements associated with each other

in higher-rank and lower-rank layers have attribute

information or time width information consistent with each

other.

25   12.   The program table creation method according to claim 10,

characterized in that a portion of said program table is rearranged on the basis of said tree structure.

13. The program table creation method according to claim 12,

5 characterized in that the rearrangement of the portion of said program table is made by employing one of a method of deriving a new solution through the use of a previous solution or a method of deriving a new solution through the use of a history related to a previous solution derivation, or by employing

10 a combination of these methods.

14. The program table creation method according to claim 1, characterized in that an arrangement of said contents is optimized on the basis of one of a score set with respect to

15 said contents, a correlation of attributes of said contents and a correlation of said contents or a combination thereof at the creation of said program table or after the creation thereof.

20 15. The program table creation method according to claim 1, characterized in that said content to be disposed at the next position is determined on the basis of said content disposed at the last position with respect to a time axis.

25 16. The program table creation method according to claim 1

or 15, characterized in that said content to be disposed at the last position is determined on the basis of said content disposed at the next position with respect to a time axis.

5 17. The program table creation method according to claim 1, characterized in that an arrangement of said contents is determined on the basis of a pattern of said plurality of contents with respect to a time axis.

10 18. The program table creation method according to claim 1, characterized in that an arrangement of said contents is changed by making reference to content attribute information indicative of attributes of said contents so that a correlation between said contents adjacent to each other reaches a maximum

15 as a whole.

19. A program table creation device for creating a program table defining a temporal arrangement of a plurality of contents, characterized in that said program table is created

20 through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents.

25 20. The program table creation device according to claim 19,

characterized in that said program table creation device is mounted in a vehicle and made to create said program table of programs to be watched and heard in the interior of said vehicle.

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21.   The program table creation device according to claim 19, characterized in that a constraint logical programming technique is used as said constraint solution technique.

10   22.   A program table creation system for creating a program table defining a temporal arrangement of a plurality of contents, characterized by comprising:

a program table creation server existing in said predetermined network and so arranged that said program table

15   is created through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents;

20   a communication unit connectable with said predetermined network and capable of transmitting said constraint condition through said predetermined network to said program table creation server and receiving said program table created by said program table creation server.

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23.   The program table creation system according to claim 22, characterized in that said communication unit is mounted in a vehicle and said program table creation server creates said program table of programs to be watched and heard in the interior

5   of said vehicle.

24.   The program table creation system according to claim 22, characterized in that a constraint logical programming technique is used as said constraint solution technique.